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(o) Temperatures (°R) and pressure (atm) at which each sample is collected.

(p) For each destruction device, a description of the device, including an indication of whether destruction occurs at the coal mine or off-site. If destruction occurs at the mine, also report an indication of whether a back-up destruction device is present at the mine, the annual operating hours for the primary destruction device, the annual operating hours for the back-up destruction device (if present), and the destruction efficiencies assumed (percent).

(q) A description of the gas collection system (manufacturer, capacity, and number of wells) the surface area of the gas collection system (square meters), and the annual operating hours of the gas collection system.

(r) Identification information and description for each well and shaft, indication of whether the well or shaft is monitored individually, or as part of a centralized monitoring point. Note which method (sampling or continuous monitoring) was used.

(s) For each centralized monitoring point, identification of the wells and shafts included in the point. Note which method (sampling or continuous monitoring) was used.

§ 98.327 Records that must be retained.

In addition to the information required by § 98.3(g), you must retain the following records:

(a) Calibration records for all monitoring equipment, including the method or manufacturer's specification used for calibration.

(b) Records of gas sales.

(c) Logbooks of parameter measurements.

(d) Laboratory analyses of samples.

§ 98.328 Definitions.

All terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

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Subpart GG—Zinc Production

§ 98.330 Definition of the source category.

The zinc production source category consists of zinc smelters and secondary zinc recycling facilities.

§ 98.331 Reporting threshold.

You must report GHG emissions under this subpart if your facility contains a zinc production process and the facility meets the requirements of either § 98.2(a)(1) or (2).

§ 98.332 GHGs to report.

You must report:

(a) CO₂ process emissions from each Waelz kiln and electrothermic furnace used for zinc production.

(b) CO₂, CH₄, and N₂O combustion emissions from each Waelz kiln. You must calculate and report these emissions under subpart C of this part (General Stationary Fuel Combustion Sources) by following the requirements of subpart C.

(c) CO₂, CH₄, and N₂O emissions from each stationary combustion unit other than Waelz kilns. You must report these emissions under subpart C of this part (General Stationary Fuel Combustion Sources) by following the requirements of subpart C.

§ 98.333 Calculating GHG emissions.

You must calculate and report the annual process CO₂ emissions using the procedures specified in either paragraph (a) or (b) of this section.

(a) Calculate and report under this subpart the process or combined process and combustion CO₂ emissions by operating and maintaining a CEMS according to the Tier 4 Calculation Methodology in § 98.33(a)(4) and all associated requirements for Tier 4 in subpart C of this part (General Stationary Fuel Combustion Sources).

(b) Calculate and report under this subpart the process CO₂ emissions by following paragraphs (b)(1) and (b)(2) of this section.

(1) For each Waelz kiln or electrothermic furnace at your facility used for zinc production, you must determine the mass of carbon in each carbon-containing material, other than fuel, that is fed, charged, or otherwise

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introduced into each Waelz kiln and electrothermic furnace at your facility for each year and calculate annual CO₂ process emissions from each affected unit at your facility using Equation GG-1 of this section. For electrothermic furnaces, carbon containing input materials include carbon electrodes and carbonaceous reducing

agents. For Waelz kilns, carbon containing input materials include carbonaceous reducing agents. If you document that a specific material contributes less than 1 percent of the total carbon into the process, you do not have to include the material in your calculation using Equation R-1 of § 98.183.

$$E_{CO2k} = \frac{44}{12} * \frac{2000}{2205} * [(Zinc)_k * (C_{Zinc})_k + (Flux)_k * (C_{Flux})_k + (Electrode)_k * (C_{Electrode})_k + (Carbon)_k * (C_{Carbon})_k] \quad (\text{Eq. GG-1})$$

Where:

E_{CO2k} = Annual CO₂ process emissions from individual Waelz kiln or electrothermic furnace "k" (metric tons).

44/12 = Ratio of molecular weights, CO₂ to carbon.

2000/2205 = Conversion factor to convert tons to metric tons.

(Zinc)_k = Annual mass of zinc bearing material charged to kiln or furnace "k" (tons).

(C_{Zinc})_k = Carbon content of the zinc bearing material, from the annual carbon analysis for kiln or furnace "k" (percent by weight, expressed as a decimal fraction).

(Flux)_k = Annual mass of flux materials (e.g., limestone, dolomite) charged to kiln or furnace "k" (tons).

(C_{Flux})_k = Carbon content of the flux materials charged to kiln or furnace "k", from the annual carbon analysis (percent by weight, expressed as a decimal fraction).

(Electrode)_k = Annual mass of carbon electrode consumed in furnace "k" (tons).

(C_{Electrode})_k = Carbon content of the carbon electrode consumed in furnace "k", from the annual carbon analysis (percent by weight, expressed as a decimal fraction).

(Carbon)_k = Annual mass of carbonaceous materials (e.g., coal, coke) charged to the kiln or furnace "k" (tons).

(C_{Carbon})_k Carbon content of the carbonaceous materials charged to kiln or furnace, "k", from the annual carbon analysis (percent by weight, expressed as a decimal fraction).

(2) You must determine the CO₂ emissions from all of the Waelz kilns or electrothermic furnaces at your facility using Equation GG-2 of this section.

$$CO_2 = \sum_{k=1}^n E_{CO2k} \quad (\text{Eq. GG-2})$$

Where:

CO₂ = Annual combined CO₂ emissions from all Waelz kilns or electrothermic furnaces (tons).

E_{CO2k} = Annual CO₂ emissions from each Waelz kiln or electrothermic furnace k calculated using Equation GG-1 of this section (tons).

n = Total number of Waelz kilns or electrothermic furnaces at facility used for the zinc production.

(c) If GHG emissions from a Waelz kiln or electrothermic furnace are vented through the same stack as any combustion unit or process equipment that reports CO₂ emissions using a CEMS that complies with the Tier 4 Calculation Methodology in subpart C of this part (General Stationary Fuel Combustion Sources), then the calculation methodology in paragraph (b) of this section shall not be used to calculate process emissions. The owner or operator shall report under this subpart the combined stack emissions according to the Tier 4 Calculation Methodology in § 98.33(a)(4) and all associated requirements for Tier 4 in subpart C of this part.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 66470, Oct. 28, 2010]

§ 98.334 Monitoring and QA/QC requirements.

If you determine CO₂ emissions using the carbon input procedure in § 98.333(b)(1) and (b)(2), you must meet the requirements specified in paragraphs (a) and (b) of this section.

(a) Determine the mass of each solid carbon-containing input material consumed using facility instruments, procedures, or records used for accounting purposes including direct measurement